Q Z X

The Journal Covering Amateur Radio and Sinclair Computers
ZX80; Micr0-Ace; ZX81; TS1000, 1500, and 2068; QL; Z88
Alex. F. Burr, K5XY, Publisher
2025 O'Donnell Drive
Las Cruces, NM
88001

Volume 9 Number 11 ($1.50 / issue) 1991 October

* EDITOR'S NOTES K5XY
* QZX FRIENDS
* WHITHER THE QL WA6DLI
* ZX RAM POWER SUPPLY BOB GLIDER
* TECHNICAL TIDBITS II K5XY
* UNCLASSIFIED ADS
* BITS AND BYTES

EDITOR'S NOTES
K5XY

QZX was a bit late last month because the machine on which it is printed broke down just before (and after) it was printed. The printing price went up 6 % too.

I am sorry that the article on the history of the QL which started last month had to be split. But if I increase the size of a given issue of QZX the postage almost doubles. We have not had much mention of the QL recently so this article helps balance things a bit. It is finished in this issue. Also in this issue is a picture ofthe author of that, and many other, QZX articles. Notice the camera in the picture. The first part of the article mentioned the use of computers for testing purposes by the manufacturer of that camera.

There are rumors in Great Britain that Sinclair will produce another new computer, perhaps this year. It is said to be a RISC type computer which could run 80286 code as fast as a 12 MHz 286. I hope it does other things much faster because that is not a very fast machine today.

There was no computer show this year that exclusively featured Sinclair computers, but there was a show in Dayton at which there was a large Sinclair presence. A large number of Sinclair dealers, clubs, and active individuals were there. Attendance was well over 15,000. The number of Sinclair groups present was about equal to the number of Mac groups there, with a few Radio Shack, Zenith, and Atari groups. A lot of Spectrum software was being sold, all on tape. It is most likely that the show will be repeated in August of next year. So keep a space on your calendar for that time.

This month is an important month in the history of the Sinclair computer. It was 10 years ago on October 7, 1981 that the ZX81 was introduced in the United States at a press conference in Boston. QZX is just about that old too.

QZX FRIENDS

WA6OUC -- Warren renewed and made a donation to the postage fund too.

W6OOA -- Al said that as he nears his 90th birthday he has to slow down a bit so he is not renewing his QZX subscription. He has been with us for a long time, so we are sorry to see him go. He sends his best wishes to all the Sinclair users.

W4FCJ -- Buford says that his Sinclairs will continue to be a part of his ham station on RTTY and packet. Unfortunately he is not continuing his subscription.

Whither the QL
WA6DLI

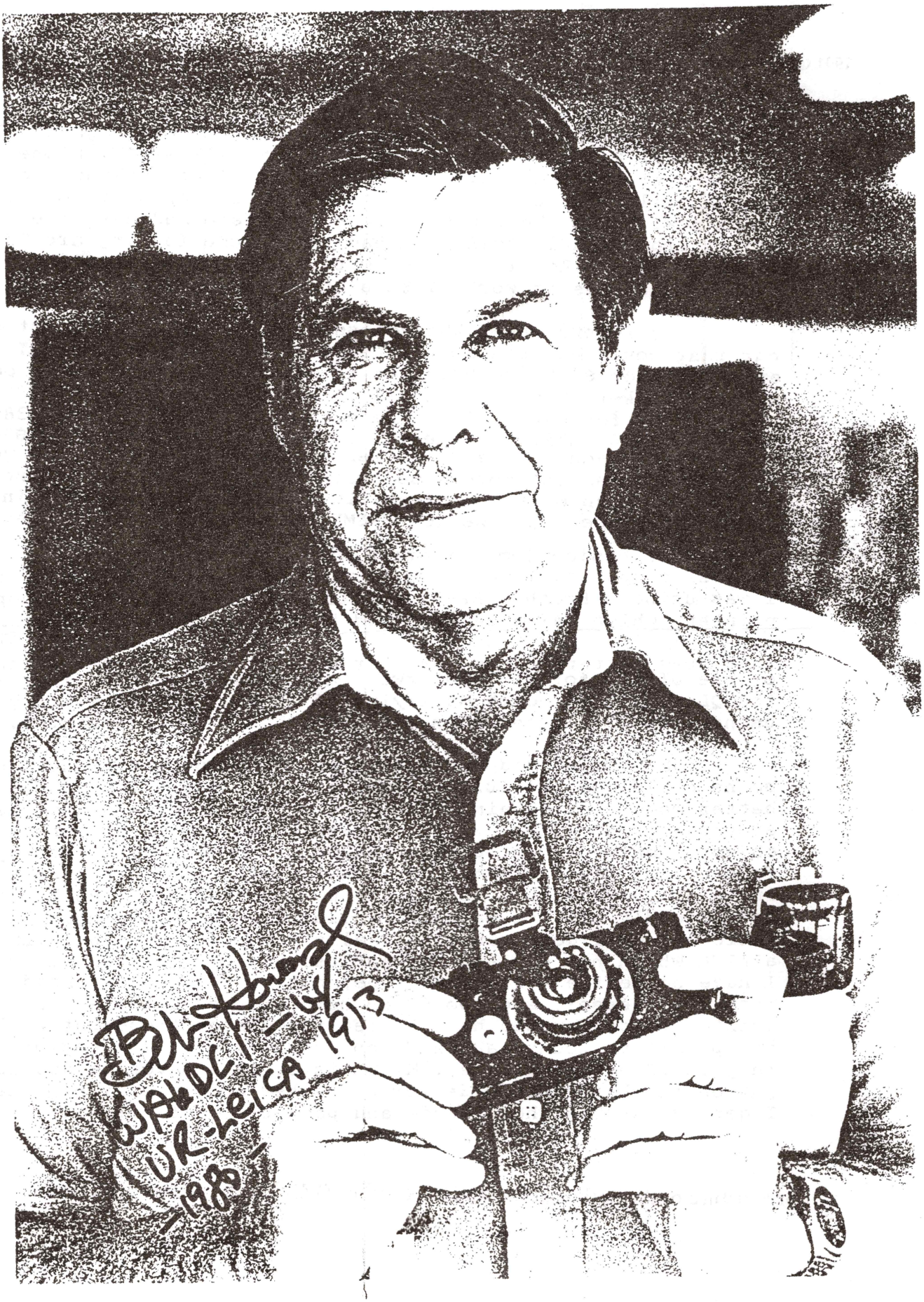
Last month Bob started an article on the backgroud, uses, and some accessories for the QL. This month he continues with some comparisons to other Sinclair computers and to some MSDOS machines. He also mentions a few more accessories and writes about some comparisons.

Another new product from Germany, by Julius Falkenburg is sold also by some of the English outlets like ECC, a QL accessory dealer and perhaps by the American vendors soon. It is a universal keyboard adapter which allows almost ANY clone IBM keyboard to be used. This means no worry about membranes or ribbon failure as a new keyboard is cheaply replaced for $30-40 brand new. It is about $80 for the interface and has an external and internal model. Again Dan had to do some fussing around to adapt it to the American model with its heavy steel plate inside etc. But he says it works like a charm with a Northgate KB.

It is true that the accessories for the QL are not cheap, but that could be said about the clone market also. The XT is available for $300-400 but almost only in the liquidation or surplus market. The entry level for a clone now is the '286 AT at about 12MHz for about $800. The clones most desired are '386SX or straight '386, which in the 33MHz versions can get up to $3000. So a $99 QL even with accessories is still affordable. If you are not into games, but more usual work pursuits, the QL has software to do more than most computers. In 1986 I had my TS-2068 in use in my workplace, when we got PRIME terminals...which to the user were an XT beside communicating with the mainframe or central computer. I was able to do more with the TS-2068, because I was using a Brother EP-44 electronic typewriter as a computer printer, which had a 24 pin head before the dot matrix printers got them. So I had superior output. I also had British software that drew better graphs that Lotus could produce, so was the envy of the office for at least two years. The same thing is true of the QL..so it is worth modifying if needed for reliability and using with disk interfaces and a good monitor and printer.

My friend did succumb to an 386 clone last month, partly so he could see the full colors his NEC can provide in VGA or better mode...but again this is more pretty screens and playing around with computers which is also irresistible if money is no object. Money has not been a reason for owning a QL with my friend, but now he is glad at how computer literate he has become in three years as he tackles the DOS command line. He had missed how friendly all the earlier Sinclairs were with single keystroke basic and well done manuals. I also have had all Sinclairs, have a LISA which now emulates a MacPlus, and an older AT clone 12MHz. I have no desire for a '386 type, but have added expanded memory, math coprocessor, and two 63 MB hard drives. I use a model 855 TI printer (once I would have killed for one of these but it looks a bit primitive today) and a Canon BJ 80 (mostly the engine of all inkjets like the HP line). My QL is still a favorite and is now put on the ham radio side for HF packet and satellite packet when I get my act together. QCode and packet work fine.

For a picture of the author of this and many other QZX articles see the next page.


WPHDL
UR-LEICA
1988

ZX RAM POWER SUPPLY

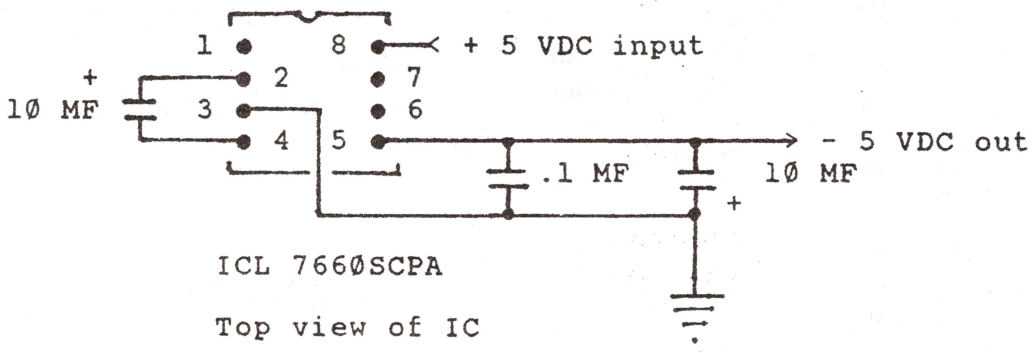
Bob Glider

I have just received the February 1991 issue of QZX and would like to pass on some information regarding the Sinclair ZX RAM Pack published in this issue.

The oscillator circuit providing - 12 VDC can be eliminated totally if 2118-7, 5 VDC RAM chips are used instead of the 4116's. There was another version of this chip of which I cannot remember the nomenclature. I will look through my old files on the ZX80/81 and if I locate the information, I will pass it on to you.

However, the oscillator circuit can still be eliminated if the following circuit is used. The heart of this circuit is the ICL 7660 positive voltage in/negative out voltage converter. Using this simple circuit will remove much of the RFI interferrence that the original circuit created.

Digi-Key Corporation sells this chip #ICL7660SCPA, Super Voltage Converter, 8 pin minidip $2.45 each.



(716) 834-1716
T & C SERVICES
20 LIBERTY TERRACE
BUFFALO, N.Y. 14215
(716) 834-1716
Call or write for a free catalog of products for the Timex Computer

TECHNICAL TIDBITS II
K5XY

I have just been sent a very interesting booklet from L.I.S.T., the Long Island Sound Sinclair-Timex Group. It is entitled ZX-81 and TS1000 Technical Tidbits Part II. I found it very interesting.

It is a continuation of the booklet published earlier and reviewed in the October 1990 issue of QZX just one year ago. It is really a continuation too. The subject matter is related and even the page numbering is designed to follow the earlier publication. Actually the title is a bit restrictive. All of the information is relevant to the TS1500 and much is applicable to the ZX80. Some references to the TS2068 have been deliberately left out however.

The LIST group did listen to the many comments made by the Sinclair community about the previous booklet. One of the biggest omissions of that effort was the absence of any material on loading problems. This effort remedies that difficulty at the very beginning with an article entitled Loading/Saving Programs and several other entries address the same problem too.

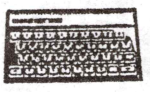
The RAM is also discussed in two major articles which contain lost of good background material although the promised schematic for the Sinclair 16 K RAM does not appear. (It does appear in the 1991 February issue of QZX though.) Information on attaching a dedicated monitor and information on connecting UHF TV's also appears.

One can always find technical goofs to poke fun at, particularly when the subject has electronics as a relatively unimportant background. Such is the case here. One set of articles touts amplifiers and transformers to boost audio voltages to improve the tape recording of programs. The next set shows clippers designed to cut back on over amplified voltages despite the havoc such treatment produces in the wave forms of the signals. Another interesting goof gives the frequency of UHF channel 33 as 146 MHz. We would really be in trouble if that were true. Strangely enough, I think the origin of that mistake is in the Radio Amateur's Handbook. There is a table there which lists on the same line a frequency of 146 MHz and a UHF channel of 33. You have to look carefully to notice that the table says it is the fourth harmonic of the frequency which falls in the listed channel.

Much of the material in the booklet consists of reprints from hard to get publications. Occasionally some of it, such as the keyboard article on page 38, is hard to read; but the booklet is a collection of information which most ZX81 and TS1000 users should have.

It only costs $4.00 and is obtainable from

L.I.S.T.
5 Peri Lane
Valley Stream, NY 11581



UNCLASSIFIED ADS

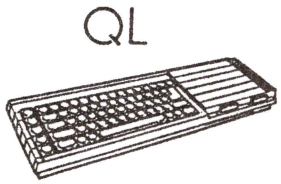
WANTED: UNCLASSIFIED ADS for publication in QZX. Cost is 1 cent for each keystroke (characters, blanks, etc.). Payment must be included with order. This is an excellent way to sell your program or unwanted equipment, ask for help, or find a specific program. Send your ad with payment to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

WANTED: Any information on "Tutor" 16 bit Graphic Computer made by Tomy. Edward L. Radtke, 1602 Woodluck Ave., Louisville, Kentucky 40205, Phone 502-458-7324.

WANTED: Votem analog interface for Timex/Sinclair. Edward L. Radtke, 1602 Woodluck Ave., Louisville, Kentucky 40205, Phone 502-458-7324.

FREE: One Byte-Back M 16 16 K RAM (no printed circuit board on the feed through socket). Contributed by KA8THG. As is. It would be appreciated if a contribution toward the mailing expenses were made. Send requests to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

FOR SALE: Timex 1000 with power supply, instruction book, and 16 K RAM. As is. $9 (plus $2 for shipping). Also TS2068 Morse Code Translator tape. $2 including shipping. Alex. F. Burr, 2025 O'Donnell, Las Cruces, NM 88001.



BITS AND BYTES

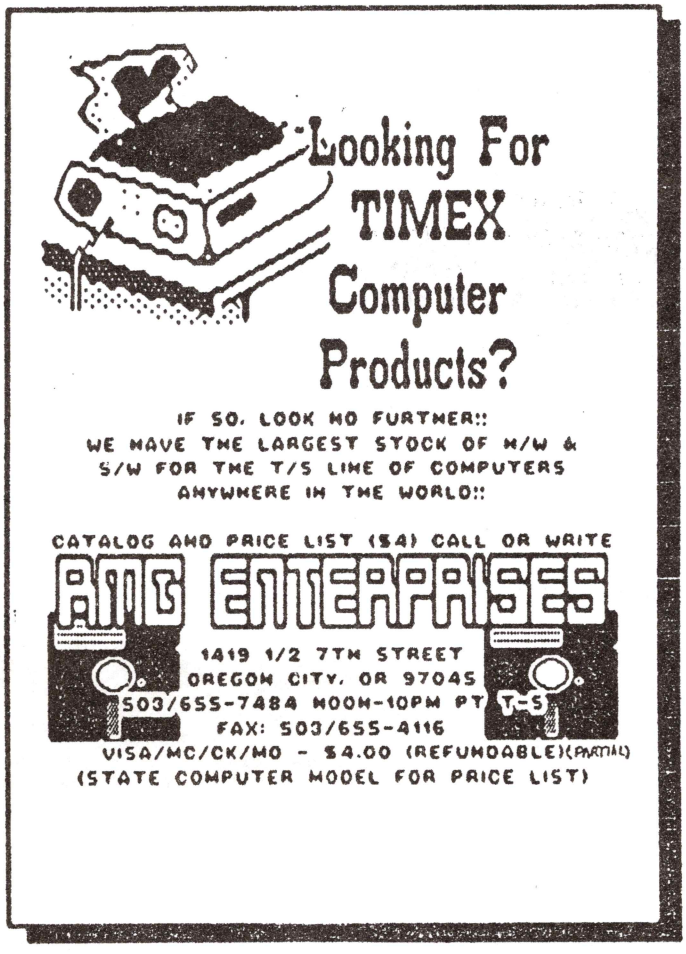
174 To print on line 24 of the TS2068 enter

PRINT#0;"Comment"; PAUSE 0

175 Thermal paper for the TS2040 printer can be had from Radio Shack. They call it TP-10 paper. It has catalog number 26-1332.

176 If you need a ribbon for the QL printer, try one for the Seikosha 1000 or the Radio Shack DMP 130.

177 A quicker way than the usual channel opening and closing to get a QL Superbasic program listing is to type "save ser1 <enter>.


Looking For
TIMEX
Computer
Products?
IF SO, LOOK NO FURTHER!!
WE HAVE THE LARGEST STOCK OF H/W & S/W FOR THE T/S LINE OF COMPUTERS ANYWHERE IN THE WORLD!!
CATALOG AND PRICE LIST ($4) CALL OR WRITE
AMG ENTERPRISES
1419 1/2 7TH STREET
OREGON CITY, OR 97045
503/655-7484 NOON-10PM PT
T-S
FAX: 503/655-4116
VISA/MC/CK/MO - $4.00 (REFUNDABLE)(PARTIAL)
(STATE COMPUTER MODEL FOR PRICE LIST)

73, K5XY

QZX presents the best software & hardware projects available for the radio amateur. While the contents are believed to be accurate, no warranty is extended on any program or project. No investigation has been made of the claims or reputation of any advertiser. It would be greatly appreciated if all correspondence requiring an answer would be accompanied by a self-addressed stamped envelope (SASE). Copyright by QZX, 1991. All rights reserved, photocopying by permission only. ISSN 1055-1735

Please send me QZX for one year, starting immediately. Enclosed is $15.00 for twelve issues. (Those with addresses not in Canada, the US, or Mexico send $25.00 in US funds for air mail delivery.) Thanks. (91/10)

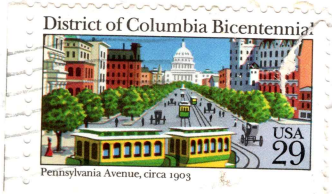
Name _____

Call _____

Address _____

City _____

State ____ Zip _____



QZX Journal
2025 O'Donnell Drive
Las Cruces, NM 88001

FIRST CLASS